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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,000	02/26/2004	Thomas M. Mayers	3608	9213

7590

07/27/2006

USG Corporation  
700 N. Highway 45  
Libertyville, IL 60048

EXAMINER
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CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/789,000	MAYERS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Alicia Chevalier	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **RESPONSE TO AMENDMENT**

1. Claims 1-14 are pending in the application, claim 10-14 are withdrawn from consideration.

### ***WITHDRAWN REJECTIONS***

2. The 35 U.S.C. §112 rejections, made of record in office action mailed February 22, 2006, pages 2-3, paragraph #4 have been withdrawn due to Applicant's amendment in the response filed May 11, 2006.

### ***REJECTIONS***

3. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

### ***Claim Rejections - 35 USC § 102***

4. Claims 1, 2, 4-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Forry et al. (U.S. Patent No. 4,585,685).

Forry discloses an acoustically porous building material (*title*) having a core (*dry-formed web, col. 3, lines 9-10*) made from a starch gel (*organic binder pregelled starch, col. 3, lines 64-66*) and mineral wool fiber (*fibrous material mineral wool, a.k.a. rock wool, col. 3, lines 56-57*) composition, wherein the front surface of the tile is coated with aggregate particles (*col. 3, lines 11-21 and figure 1*) having an average particle mean diameter of at least about 1,000 microns,

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and more specifically ranging from about 1,400 microns to about 2,500 microns (*6 mesh, col. 8, line 27*). The aggregate particles are selected from the group consisting of calcium carbonate, crushed marble, sand, clay, perlite, vermiculite, crushed stone and glass (*col. 4, lines 31-41*). The building material has a noise reduction coefficient (NRC) value of at least about 0.50 (*col. 10, lines 17-18*).

The preamble “an abuse-resistant, cast ceiling tile” is deemed to be a statement with regard to the intended use and is not further limiting in so far as the structure of the product is concerned. In article claims, a claimed intended use must result in a ***structural difference*** between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. MPEP § 2111.02.

The limitation “abuse-resistant” is a functional limitation and is deemed to be a latent property of the prior art since the prior art is substantially identical in composition and/or structure. MPEP 2145 (II).

The limitation “cast” is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113.

Examiner’s Notes: No. 6 mesh is 2830 microns which is deemed to be ***about*** 2500 microns. The term “having” is interpreted to mean comprising.

***Claim Rejections - 35 USC § 103***

5. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baig (U.S. Patent Application Publication No. 2002/0139611).

Baig discloses an acoustical ceiling tile (*title*) having a core (*fiber rich surface layer made of mineral wool fibers, paragraph 0021*) made from a starch gel (*starch binder of starch in the form of a gel, paragraph 0027*) and mineral wool fiber (*fiber rich surface layer made of mineral wool fibers, paragraph 0021*) composition, wherein the front surface of the tile is coated with aggregate particles (*calcium carbonate particle coating, paragraph 0061*). The aggregate particles are selected from the group consisting of calcium carbonate, crushed marble, sand, clay, perlite, vermiculite, crushed stone and glass and more specifically calcium carbonater (*paragraph 0061*). The building material has a noise reduction coefficient (NRC) value of at least about 0.50 (*paragraph 0062*).

The limitation “abuse-resistant” is a functional limitation and is deemed to be a latent property of the prior art since the prior art is substantially identical in composition and/or structure. MPEP 2145 (II).

The limitation “cast” is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113.

Baig fails to disclose that the particles have an average particle mean diameter of at least about 1,000 microns, more specifically ranging from about 1,400 microns to about 2,500 microns.

However, Baig further disclose that the particles are coarse (*paragraph 0061*).

Therefore, the exact mean diameter of the particles is deemed to be a result effective variable. It would require routine experimentation to determine the optimum value of a result effective variable, such as diameter, in the absence of a showing of criticality in the claimed diameter. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). Furthermore, it is noted that Applicant defines coarse particles as to have a mean diameter of 2,500 microns (*specification page 9, lines 28-30*).

#### ***ANSWERS TO APPLICANT'S ARGUMENTS***

6. Applicant's arguments in the response filed May 11, 2006 regarding the 35 U.S.C. 112 rejections of record have been considered but are moot since the rejections have been withdrawn.

7. Applicant's arguments in the response filed May 11, 2006 regarding the 35 U.S.C. 102 and 103 rejections of record have been carefully considered but are deemed unpersuasive.

Regarding Applicant's argument about the Baig and Forry references teaching a different method other than casting, the limitation "cast" is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113. Applicant has not

provided any evidence that producing a tile by casting is structurally different than a tile made by a water-felting process.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ac

7/20/06



**ALICIA CHEVALIER  
PRIMARY EXAMINER**